



SAT-C07: The Disappearing Rural Landscape – Mitigating Climate Change & Rapid Urbanization

Speakers:

Dana Brown, FASLA, PLA, AICP, LEED AP – President and Managing Principal, Dana Brown & Associates, Inc.

Richard Longman, ASLA, AIA, LEED AP – Principal, Dana Brown and Associates

Bridget P. Bailey, M.Ed, CFM – Community Development Director - Tangipahoa Parish Government

Learning Objectives

- Discover strategies for requiring development in rural communities to maximize preservation of rural landscapes.
- Learn how stormwater management strategies can be employed to preserve and protect rural landscapes.
- Learn about innovative land development codes that mitigate increased flood risk.
- Understand an innovative methodology for identifying the most effective regional stormwater management locations without performing a costly and complex hydrologic and hydraulic (H&H) model.

Session Agenda

1. Introduction & Agenda
2. Rural Landscapes are Disappearing
3. Root Causes
4. Issues & Challenges of Development in Rural Landscapes
5. Regional Scale Strategies
6. Strategies for Land Development Policies
7. Strategies for Site Planning & Design
8. Changing the Land Development Paradigm
9. Cumulative Benefits are Extensive
10. Q&A

Rural Landscapes Are Disappearing

- Population growth – 1945 to 2020 by a factor of 2.3 (multpl.com)
- Urbanization of land – 1945 to 2020 by a factor of 4 (Bloomberg.com)
- Rural agriculture – industrial revolution –technology & service industries
- Own your piece of land

Root Causes

- America has lots of land
- Your own piece of land
- Tame the wilderness
- Agriculture industry
- Timber industry
- Development approach
 - Antiquated practices
 - Codes that facilitate & prioritize development of land
 - Undeveloped land – a term that begs for development

Issues & Challenges of Development in Rural Landscapes

- Clear cutting the land – a blank canvas
- Filling and grading to make it developable
- Response to FEMA FIRM FFE requirements
- Construction of excessive impervious surfaces
- Traditional drainage approach
- Problems created upstream & outside jurisdiction

Regional Scale Strategies

- Key to comprehensive strategies
- Regional analysis of hydrology
- Regional stormwater management projects
- Regional projects as recreational opportunities
- Beyond jurisdictions

Strategies for Land Development Policies

- Flip the priorities
- Preserve forested habitats & natural hydrology
- Stormwater management requirements for sites
- Incentivize better design
- Incentivize greater conservation
- Disincentivize development in floodplains

Strategies for Land Development Site Planning & Design

- Employ principles of Low Impact Development
- Use attributes of the site & environs as foundation
- Plan & design for an authentic sense of place
- Provide for climate adaptation

Changing the Land Development Paradigm

- Establish the value of a new paradigm
- Inform the public
- Education municipal leadership
- Convince engineers
- Landscape architects take the lead

Cumulative Benefits Are Extensive

- Costs less
- Preserves natural environment
- Responds to context
- Maintains a sense of place
- Reduces flood risk
- Reduces adverse water quality impacts
- Improves air quality
- Preserves wildlife habitats
- Avoids the urban heat island effect
- Facilitates healthier communities